



# A STUDY OF ICT AWARENESS & TRAINING NEEDS OF HIGH SCHOOL TEACHERS OF KAIMOOR DISTRICT

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## ABSTRACT

The study was conducted to find out the level of ICT awareness and ICT training needs among high school teachers with respect to gender and level of teaching. Descriptive Survey method was employed to conduct this study. To find out ICT Awareness and ICT training needs, the researcher used self-constructed ICT Awareness Questionnaire and ICT Training Needs Checklist respectively. The researcher randomly selected 100 high school teachers working in the government schools of Kaimoor district of Bihar. The data was analyzed by using mean, standard deviation, and t-test. The findings of the study revealed that most of the high school teachers have average level of awareness towards ICT. It was found that there is no significant difference in ICT Awareness of teachers with respect to their gender, while higher secondary teachers have more awareness towards ICT than secondary teachers. The results show that majority of the high school teachers need some sort enrichment training related to ICT. It was also found that there is no significant difference in ICT training needs of teachers with respect to gender and level of teaching.

**KEYWORDS:** ICT Awareness, ICT Training Needs, High School Teachers, Computers, Broadcasting Technologies, Software Packages.

## INTRODUCTION:

The role of Information and Communication Technology in transforming the society is considered to be very significant. Today, modern technologies are responsible for changing the nation's economy and daily life of individuals. ICT increases the accessibility to the vast sources of latest information to the large number of people in remote areas. It provides educational facilities to the deprived and promotes individualized instructions to learners suited to their pace of learning. It is necessary for the teachers to be aware with the role of modern ICT tools in classroom instruction as well as personal development. The National Policy of Education, 2020 also highlighted the importance of technology and its use and integration in education. ICT refers to the set of technologies that are used in collection, storage, retrieval and transfer of information in various forms. ICT significantly influences different aspects of human development viz. physical, mental, emotional, social and ethical. The recent rise of epidemic situation necessitates the need of ICT integration in education. ICT is very much needed for our Indian education system, as it is intimately concerned with the problems of education and training. Building new learning environment with the support of ICT may bring a breakthrough in conventional paradigm of teaching that is still present in our education system. These changes may be favourable in the transaction of learning experiences ensuring meaningful learning, when they are part of the challenges that a teacher faces in practical situations. Teacher's training has been understood as a set of courses which teachers attend more or less actively with the expectation of great changes in their competencies and practices with their concerned working environment. So, assessment of teacher's training need with reference to ICT in their natural working context is essential before planning a future training program.

In the present study ICT Awareness was assessed on fundamental knowledge about computers, broadcasting technologies, Network & Communication Technology and ICT uses. While Training need was assessed by preferences on Hardware tools and Software Packages.

## REVIEW OF RELATED LITERATURE:

T, Teo (2008) carried out a survey on Pre-service teacher's attitude towards computer use in Singapore. 139 samples were selected for the study. Questionnaire on perceived usefulness, factual intention, noticed control & liking to use the computer was used to assess attitude towards computer use. Findings revealed that teachers were more specific about their attitude & intention towards computers uses than other two factors i.e. usefulness and control of the computer.

Mwalango, Alucin (2011) examined teacher's perception about the use of ICT tools in teaching, professional development, administration and personal use. 74 teachers enrolled in pedagogy courses in university of Tanzania were selected as sample. Data were collected through online survey questionnaire. Findings revealed that teachers use wide range of ICT in teaching, administration, personal use, and in professional development. It was also identified that frequency of ICT uses was influenced by access, and ICT competence was influenced by training.

Banarjee, Gargi (2014) analysed the trend and pattern of ICT in India. The study revealed that majority of the states of India was still far from being satisfactory in

development of ICT.

Singh, Vikramjeet (2018) conducted a study to analyse the project ICT@schools and its implications. 1551 students from 87 government schools were chosen from selected districts of Bihar. Findings revealed scant availability and the poor conditions of ICT labs for students. It was also found that both the gender have equal pattern and perception of ICT uses.

By the review of previous studies, the researcher noticed a lack of updated assessment on teacher's awareness and training needs towards ICT.

## RATIONALE OF THE STUDY:

Teachers are the core component of the educational system. Unless they are updated with technologies and new innovations, we cannot expect any qualitative change in educational system. ICT makes teaching- learning process much easier and interesting for the teachers as well as for the learners. It is a powerful approach which helps in conceptual development, critical thinking and problem solving. Effective ICT integration in education contributes solutions to the problems in daily classroom teaching. The present study was an attempt to find out the awareness and training needs of ICT among high school teachers of Kaimoor district of Bihar.

## OBJECTIVES OF THE STUDY:

- To study the level of ICT awareness among High school Teachers.
- To analyze the ICT awareness among High school Teachers with respect to Gender and Level of Teaching.
- To study the level of ICT training needs among High school Teachers.
- To analyze the ICT training needs among High School Teachers with respect to Gender and Level of Teaching.

## HYPOTHESIS OF THE STUDY:

01. There is average level of ICT awareness among high school teachers of Kaimoor district.
02. There is no significant difference in ICT awareness among high school teachers with respect to gender.
03. There is no significant difference in ICT awareness among high school teachers with respect to level of teaching.
04. Teachers of Kaimoor district require some sort of training in ICT related skills.
05. There is no significant difference in ICT training needs among high school teachers with respect to Gender.
06. There is no significant difference in ICT training needs among high school teachers with respect to level of teaching.

**METHOD OF THE STUDY:**

The researcher has employed descriptive survey method for the study.

**Sample:** For the purpose of the study a sample of 100 high school teachers were selected from 10 government schools in Kaimoor district through stratified random sampling technique.

**Tools:** ICT Awareness Questionnaire and Checklist on ICT Training Needs developed by researcher were used.

**Reliability and Validity:** The reliability of questionnaire and checklist was computed through Split-half method and found to be 0.82 & 0.79 respectively. The developed tools were given to the experts in the field of Education and ICT for their suggestions. Thus face validity and content validity of both tools were established.

**Statistics Used:** Mean , Standard Deviation & t-test.

**ANALYSIS AND INTERPRETATION OF DATA:****Table 1: Level of ICT Awareness among High School Teachers**

Level of ICT Awareness	Scores	Percentage (%)
Very Good	30&Above	17%
Good	27-29	19%
Average	24-26	30%
Poor	21-23	15%
Very Poor	Below 20	19%
Total		100%

Table 1, shows that 17% teachers possess very good level of awareness, 19% teachers possess good level of awareness, 30% teachers possess average level of awareness, 15% teachers possess poor level of awareness and 19% teachers possess very poor level of Awareness related to ICT. Hence, most of the high school teachers have average level of ICT awareness and the hypothesis no. 01 is retained.

**Table 2: ICT awareness among high school teachers with respect to Gender**

Gender	N	Mean	Standard Deviation	t-value	Level of Significance
Male	50	25.96	5.42	0.66	NS
Female	50	25.14	7.21		

Degree of Freedom: 98

It was found from the table 2 that the mean score of ICT awareness of male and female high school teachers were 25.96 and 25.14 with S.D. 5.42 and 7.21 respectively. The obtained't' value 0.66 was smaller than table value 1.99 at 0.05 and 2.63 at 0.01 level of significance. So the hypothesis no. 02 has been accepted. We can say that male and female teachers do not differ significantly in their awareness towards ICT.

**Table 3: ICT awareness among high school teachers with respect to level of Teaching**

Level of Teaching	N	Mean	Standard Deviation	t-value	Level of Significance
Secondary	65	25.21	6.90	2.26	0.05
Higher secondary	35	27.97	6.18		

Degree of Freedom: 98

From the above table, the calculated't' value 2.26 is greater than table value 1.99 at 0.05 level of significance. So, the hypothesis no.03 was rejected. We can say that secondary and higher secondary teachers differ significantly in their awareness towards ICT.

**Table 4: Level of ICT Training Needs among High School Teachers**

Level of ICT Training needs	Scores	Percentage (%)
Not needed	Below25	24%
Slightly needed	26-32	33%
Average needed	33-39	27%
Adequate needed	40-46	10%
Most needed	47& above	6%
Total		100%

From Table 4, it was found that 24% teachers do not require ICT training, 33% teachers have requirement of minor enrichment training related to ICT, 27%

teachers are averagely needed, 10% teachers have requirement of adequate training and only 6% teachers are highly needed of ICT training. Hence, most of the high school teachers have requirement of some sort of training needs related to ICT. Consequently, hypothesis no. 04 has been retained on the basis of analysis of the data.

**Table 5: ICT training needs among high school teachers with respect to Gender**

Gender	N	Mean	Standard Deviation	t-value	Level of Significance
Male	50	29.46	12.33	0.24	NS
Female	50	28.9	10.51		

Degree of Freedom: 98

It was found from the table 5 that the mean score of ICT training needs of male and female high school teachers were 29.46 and 28.9 with S.D. 12.33 and 10.51 respectively. The obtained't' value 0.24 was smaller than table value 1.99 at 0.05 and 2.63 at 0.01 level of significance. So the hypothesis no. 05 was admitted. We can say that male and female teachers do not differ significantly in their training needs towards ICT.

**Table 6: ICT training needs among high school teachers with respect to level of Teaching**

Level of Teaching	N	Mean	Standard Deviation	t-value	Level of Significance
Secondary	65	28.46	10.64	0.81	0.05
Higher secondary	35	30.51	12.75		

Degree of Freedom: 98

From the above table, the calculated't' value 0.81 is less than table value 1.99 at 0.05 and 2.63 at 0.01 level of significance. So, the hypothesis no. 06 was assented. We can say that secondary and higher secondary teachers do not differ significantly in their training needs towards ICT.

**MAJOR FINDINGS OF THE STUDY:**

- The results of the study reveal that most of the high school teachers have average level of ICT awareness.
- It was found that there is no significant difference in ICT awareness between male and female high school teachers.
- Higher secondary teachers have more awareness towards ICT compared to secondary teachers.
- The Study reveals that majority of the high school teachers have requirement of some sort of training of ICT.
- It was also found that there is no significant difference in ICT training needs among high school teachers with respect to gender and level of teaching.

**EDUCATIONAL IMPLICATIONS:**

- This study may be helpful in bringing awareness among teachers about their requirement of ICT training needs and the necessity of establishing ICT based culture in the school.
- The results of the study suggest that there is need to conduct ICT orientation program for secondary teachers and students at graduation level as well, because level of qualification influences the awareness towards ICT.
- The results of the study also evoke the teacher trainees to acquire necessary ICT skills and before entering into the teaching profession.
- The study increases the awareness among the masses to provide ICT facility to their educational institutions as well as to their wards in view of the emerging necessity.
- The policy makers, administrators should organize ICT related training program for teachers as well as students.

**CONCLUSION:**

The study revealed the average awareness level of most of the high school teachers towards ICT. Though, no significant difference in ICT awareness has been discovered in teachers with respect to their gender, the higher secondary teachers have been found having more awareness towards ICT than secondary teachers. The results indicate that majority of the high school teachers need some sort enrichment training related to ICT skills. In this concern there is no significant difference among teachers with respect to their gender and level of teaching. Though this study reveals the level of ICT awareness and training needs of High school teachers of Kaimoor district, it is reflective of the situation of other districts of Bihar as well. The results demand a proper assessment of the situation at

state level, to provide proper ICT facilities and infrastructure in the government schools and to organize appropriate enrichment training programme of ICT skills for the high school teachers. ICT based education will surely enhance the learning outcome and can provide a greater opportunity to ensure academic excellence and quality education in the schools of Bihar.

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